

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY
SUBCOMMITTEE ON RESEARCH AND TECHNOLOGY
SUBCOMMITTEE REPORT

H.R. 1786, “The National Windstorm Impact Reduction Act Reauthorization of 2013”

I. Purpose

The purpose of H.R. 1786, the *National Windstorm Impact Reduction Act Reauthorization of 2013*, sponsored by Representative Neugebauer (R-TX-19), is to reauthorize the National Windstorm Impact Reduction Program (NWIRP) through Fiscal Year 2016. NWIRP is a multi-agency program that supports efforts to mitigate the impacts of wind hazards through targeted research and development to better understand and prepare for windstorms.

II. Background and Need for Legislation

Wind hazards—which include tornados, hurricanes, and derechos—are threats to all fifty states and cause injuries, deaths, economic disruptions, and property damage. Millions of Americans live in areas vulnerable to storms with damaging winds. The tornadic events of 2011 and 2013 show the devastating results of windstorms. The National Weather Service reported 553 fatalities attributed to tornadoes alone in 2011, compared to 109 American deaths in the 10 year average. As populations continue to grow in areas prone to hurricanes, tornadoes, and windstorms, vulnerability to severe weather will only increase. In 2005, the National Science and Technology Council (NSTC) stated that America’s primary focus on disaster response is “an impractical and inefficient strategy for dealing with these ongoing threats. Instead, communities must break the cycle of destruction and recovery by enhancing their disaster resilience.”

NWIRP was established in 2004 through legislation authored by Rep. Neugebauer. Under the program, the National Oceanic and Atmospheric Administration (NOAA), the National Institute of Standards and Technology (NIST), the National Science Foundation (NSF), and the Federal Emergency Management Administration (FEMA) support activities to improve the understanding of windstorms and their impacts, and to develop and encourage the implementation of cost-effective mitigation measures to reduce these impacts. The program was originally authorized for three years through FY 2008 and has been funded without an authorization since then.

OSTP submitted a NWIRP implementation plan in April 2006, which assessed programs relevant to the goals of NWIRP across eight federal agencies and identified important areas of research that were not covered by current activities. Knowledge gaps were identified in the three broad categories of research authorized in the original NWIRP Act: understanding windstorms; assessing the impacts of windstorms; and mitigation against the effects of windstorms. The implementation plan also recommended a continued role for the Interagency Working Group within the National Science and Technology Council’s (NSTC) Committee on Environment and Natural Resources, Subcommittee on Disaster Reduction.

H.R. 1786 strengthens NWIRP by transferring its leadership from OSTP to NIST. The bill also: assigns responsibilities to the agencies that make up the program; requires the Interagency Coordinating Committee to develop a strategic plan that outlines the prioritized goals of the Program, research objectives to attain those goals, and how research results will be transferred into outcomes—such as improved building codes; creates a NWIRP advisory committee, which sunsets the at the end of the authorization period; and authorizes funding for the programs from FY2014 through FY2016.

III. Subcommittee Actions

On June 5, 2013, the Subcommittees on Research and Technology held a hearing examining the current role of research and development in mitigating the damaging effects of windstorms across the Nation and the methods of transferring the results of research into practice for stakeholders including building code developers, builders, and property owners. The hearing reviewed the activities of the National Windstorm Impact Reduction Program (NWIRP) and H.R. 1786, *The National Windstorm Impact Reduction Act Reauthorization of 2013*.

The Subcommittees heard testimony from Dr. Ernst Kiesling, Research Faculty, National Wind Institute, Texas Tech University; Ms. Debra Ballen, General Counsel and Senior Vice President, Public Policy, Insurance Institute for Business & Home Safety; and Dr. David Prevatt, Assistant Professor, Department of Civil and Coastal Engineering, University of Florida.

The Subcommittee on Research and Technology met to consider H.R. 1786 on June 28, 2013.

The Subcommittee considered three amendments, and approved one.

- An amendment offered by Ms. Esty to add the definition of “lifelines” to the bill was agreed to by voice vote.
- An amendment offered by Ms. Wilson to allow the head of an agency to decline to implement the requirements of the Act if the head of such agency determines that sufficient funds are not available and requires a report to Congress within 30 days of making such a determination was not agreed to by voice vote.
- An amendment offered by Mr. Peters to add two additional titles to the bill to reauthorize the National Earthquake Hazards Program and to amend the fire research program was withdrawn.

The bill, as amended, was agreed to by voice vote, and was favorably reported to the full Committee by voice vote.

IV. Section by Section Analysis

H.R. 1786, the *National Windstorm Impact Reduction Act Reauthorization of 2013*

Section 1. Short Title

This section establishes the short title as the “National Windstorm Impact Reduction Reauthorization Act of 2013.”

Section 2. Definitions

This section amends the National Windstorm Impact Reduction Act of 2004 to define the “Director” of the Program as the Director of the National Institute of Standards and Technology (NIST) rather than the Director of the White House Office of Science and Technology Policy (OSTP). This section also defines “Lifelines” to mean the public works and utilities, oil and gas pipelines, electrical power and communication facilities and infrastructure, and water supply and sewage treatment facilities.

Section 3. National Windstorm Impact Reduction Program

This section identifies the four agencies that make up the National Windstorm Impact Reduction Program (NWIRP): NIST, the National Science Foundation (NSF), the National Oceanic and Atmospheric Administration (NOAA), and the Federal Emergency Management Agency (FEMA); defines NIST as the lead program agency; and assigns responsibilities to the four program agencies.

As the new lead agency, NIST’s activities include planning and coordinating the Program; supporting the development of performance-based engineering tools; requesting the assistance of Federal agencies other than Program agencies as necessary; coordinating all Federal post-windstorm investigations; and issuing recommendations to assist in informing model codes when warranted by research or investigative findings. In addition to the lead agency responsibilities, NIST shall also conduct research and development to improve model building codes, voluntary standards, and best practices for the design, construction, and retrofit of buildings, structures, and lifelines.

NSF activities include research in engineering and the atmospheric sciences to improve the understanding of the behavior of windstorms and their impact on buildings, structures, and lifelines.

NOAA activities include the support of atmospheric science research to improve the understanding of the behavior of windstorms and their impact on buildings, structures, and lifelines.

FEMA activities include the development of risk assessment tools and effective mitigation techniques; data collection and analysis; and public outreach, information dissemination, and implementation of mitigation measures.

Additionally, this section creates an Interagency Coordinating Committee on Windstorm Impact Reduction. The Committee is chaired by the Director of NIST and is made up of the heads of

FEMA, NOAA, NSF, OSTP, the Office of Management and the Budget (OMB), and the head of any other Federal agency the Chair considers appropriate. The Committee is to meet not less than 2 times a year and is tasked with developing and submitting to Congress a strategic plan, progress report, and coordinated budget for the Program.

Section 4. National Advisory Committee on Windstorm Impact Reduction

This section amends the National Windstorm Impact Reduction Act of 2004 to reauthorize and update an existing Advisory Committee for NWIRP of at least 7 relevant non-Federal employee experts to offer recommendations and assessments on program developments, priorities, coordination, and revisions as necessary. This section requires the Advisory Committee to report to the Director of NIST on the assessment and its recommendations at least every two years. The authority for the Advisory Committee terminates on September 30, 2016.

Section 5. Authorization of Appropriations

This section provides authorizations of appropriations as follows:

For FEMA: \$2,000,000 for each fiscal year 2014 through 2016.

For NSF: \$11,400,000 for each fiscal year 2014 through 2016.

For NIST: \$5,500,000 for each fiscal year 2014 through 2016.

For NOAA: \$2,500,000 for each fiscal year 2014 through 2016.